

WHAT IS CLAIMED IS:

1 *Sub A⁴* 1. A method of manufacturing an air bag cover assembly, the
2 method comprising:

3 providing a front panel, a back plate, a switch and infrared-absorbing
4 material;

5 positioning the front panel and the back plate so that inner surfaces of
6 the front panel and the back plate define a switch pocket therebetween;

7 positioning the switch in the switch pocket;

8 directing infrared radiation at the infrared-absorbing material for a
9 time sufficient to heat the infrared-absorbing material to a desired temperature;

10 controlling the amount of heat applied to the infrared-absorbing
11 material by the infrared radiation; and

12 cooling the heated infrared-absorbing material, the cooled material
13 fixedly securing the back plate to the front panel.

1 2. The method as claimed in claim 1 further comprising the step
2 of forcing the heated infrared-absorbing material to flow prior to the step of cooling.

1 3. The method as claimed in claim 1 wherein the back plate
2 includes a plurality of spaced holes extending therethrough and wherein the infrared-
3 absorbing material forms a plurality of stakes connected to the inner surface of the
4 front panel and extending through the plurality of spaced holes and wherein the
5 heated infrared-absorbing material forms a plurality of solid connectors after the step
6 of cooling.

1 4. The method as claimed in claim 1 wherein the infrared-
2 absorbing material is a heat-activated adhesive and wherein the method further
3 comprises applying the adhesive to at least one of the inner surfaces.

1 5. A system of manufacturing an air bag cover assembly including
2 a front panel, a back plate, a switch and infrared-absorbing material, the system
3 comprising:

4 at least one infrared lamp for emitting infrared radiation;
5 a base including a fixture mounted thereon for receiving and retaining
6 the front panel and the back plate so that inner surfaces of the front panel and the
7 back plate define a switch pocket therebetween; and
8 a controlled coupled to the at least one infrared lamp for controlling
9 power supplied to the at least one infrared lamp so that the at least one infrared lamp
10 emits infrared radiation at the infrared-absorbing material for a time sufficient to heat
11 the infrared-absorbing material to a desired temperature, wherein the heated infrared-
12 absorbing material bonds the plastic parts together when cooled.

1 6. The system as claimed in claim 5 further comprising a
2 mechanism mounted for movement relative to the base for forcing the heated
3 infrared-absorbing material to flow.

1 7. The system as claimed in claim 5 wherein the back plate
2 includes a plurality of spaced holes extending therethrough and wherein the infrared-
3 absorbing material forms a plurality of stakes connected to the inner surface of the
4 front panel and extending through the plurality of spaced holes and wherein the
5 heated infrared-absorbing material forms a plurality of solid connectors when cooled.

1 8. The system as claimed in claim 5 wherein the infrared-
2 absorbing material is a heat-activated adhesive.